

LOW-POWER HAND-HELD TRANSACTION DEVICE

RELATED APPLICATIONS

This application is a continuation-in-part application of U.S. application Serial No. 09/064,395, filed April 22, 1998, allowed, which is a continuation-in-part application of U.S. application Serial No. 8/657,892 filed June 7, 1996, issued November 7, 2000, Pat. No. 6,144,848, which is a continuation-in-part of U.S. applications Serial Nos. 08/482,261, ^{now abandoned} 08/485,083 and 08/480,614, all filed June 7, 1995.

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TECHNICAL FIELD

This invention relates to hand-held telecommunications devices and, in particular, to an electronic hand-held device for inputting and sending requests and for receiving and outputting responses to the requests.

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BACKGROUND OF THE INVENTION

The acquisition of goods and services by placing orders with retailers and distributors is a vital component of modern commerce. Several different technologies for placing and receiving commercial orders currently account for the bulk of commercial order entry. Probably the most familiar and natural method of order entry is that of personal travel to a retail supplier for a face-to-face transaction paid for either in cash, by check, by credit card, or by an electronic transfer of funds. While such face-to-face transactions allow a purchaser to thoroughly inspect the goods and services that are being purchased, and while such transactions are relatively secure for both the purchaser and the retailer, especially when paid for in cash, face-to-face transactions are extremely inefficient in time and in communications costs. A purchaser generally travels to the retailer's place of business by car or by public transportation at a relatively high cost in time and energy, often incurring significant risks in personal safety. While a cash transaction is relatively secure, the process of bringing the cash to the retailer's place of business and of transporting purchased goods back to their place of use or